

11808 Northup Way, Suite 104
Bellevue, Washington
98005

206/889-1000

SF 3.9.1
AR 3.11.1

76



ICF TECHNOLOGY INCORPORATED

February 10, 1992

Ms. Christine Psyk
Remedial Project Manager
U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue
Seattle, Washington 98101

RECEIVED

FEB 12 1992

SUPERFUND BRANCH

Dear Christine:

Attached please find a table that compares the chemicals of concern for the South Tacoma Field Site selected by ICF to those selected by the Washington State Department of Health (DOH). Included in the table are the chemicals considered by either ICF or DOH to be of potential concern at the STF site. Chemicals not considered to be of concern by either party are not shown. As ICF's chemicals of concern were developed for surface soils, the comparison occurred between ICF's chemicals of concern and those selected by DOH for the "on-site" area. The comparison of the dioxin results is in progress and the results will be sent to you as soon as the comparison is complete.

I would be happy to place this information in whatever format you think is best for the correspondence to DOH. If you would like, we can discuss the possibilities.

Sincerely,

Marjorie Norman
Project Manager

Attachment

3.9.1- 1021386

**COMPARISON OF CHEMICALS SELECTED
BY DOH AND ICF AS CHEMICALS OF CONCERN IN
SURFACE SOILS AT THE SOUTH TACOMA FIELD SITE.^{a,b}**

Chemical	Department of Health		ICF		Comments
	Maximum Detected Concentration	Chemical of Concern ?	Maximum Detected Concentration	Chemical of Concern ?	
VOLATILE ORGANIC CHEMICALS (UG/KG):					
Benzene	12	YES	12	No	Only 3 detects; all below RBSL ^c of 2,000.
Chloroform	36	YES	36	No	Only 2 detects; both below RBSL of 10,000.
Tetrachloroethylene	J 5	YES	J 5	No	Only 1 detect; below RBSL of 1,000.
Trichloroethylene	J 9	YES	J 9	No	Only 1 detect; below RBSL of 6,000.
SEMIVOLATILE ORGANIC CHEMICALS (UG/KG):					
Bis(2-ethylhexyl)phthalate	J 1,300	YES	J4 4,200	No	All detects below RBSL of 5,000.
Carcinogenic PAHs	20,000	?	9,900 (20,000) ^d	YES	Above RBSL of 6.
PESTICIDES/PCBs (UG/KG):					
PCBs	1254--42,000	No	1254--42,000	YES, for class	> 5% detections over RBSL of 8.
	1260-- 1,000	YES	1260--1,000	YES, for class	Only 3 detects; Dismantling Yard-350 and 440; Railyard- 1,000.
Dieldrin	33	YES	33	No	Only 1 detect; above RBSL of 4.

**COMPARISON OF CHEMICALS SELECTED
BY DOH AND ICF AS CHEMICALS OF CONCERN IN
SURFACE SOILS AT THE SOUTH TACOMA FIELD SITE.^{a,b} (Continued)**

Chemical	Department of Health		ICF		Comments
	Maximum Detected Concentration	Chemical of Concern ?	Maximum Detected Concentration	Chemical of Concern ?	
INORGANIC CHEMICALS (MG/KG):					
Aluminum	E/J4 104,000	No	E/J4 104,000	YES	No RBSL with which to compare; all detects except maximum detect are within 2X background.
Antimony	53.2	YES	N/J4 491 (Sample #911)	YES	Agreement.
Arsenic	395	YES	696 (Sample #547)	YES	Agreement.
Beryllium	* 14.4	YES	* 14.4	YES	Agreement.
Cadmium	29.4	YES	N/J4 29.9 (Sample #426)	YES	Agreement.
Chromium	501	YES	E/N 707 (Sample #399)	YES	Agreement.
Cobalt	135	No	135	YES	Above RBSL of 0.25 in all areas.
Copper	E/J4 163,000	No	E/J4 163,000	YES	Found well above RBSL of 2000 in Dismantling Yard, Railyard, and Amsted. Also well above max. background of 34.
Lead	*/J4 118,000	YES	*/J4 118,000	YES	Agreement.
Manganese	*/J4 21,800	YES	*/J4 21,800	YES	Agreement.

**COMPARISON OF CHEMICALS SELECTED
BY DOH AND ICF AS CHEMICALS OF CONCERN IN
SURFACE SOILS AT THE SOUTH TACOMA FIELD SITE.^{a,b} (Continued)**

Chemical	Department of Health		ICF		Comments
	Maximum Detected Concentration	Chemical of Concern ?	Maximum Detected Concentration	Chemical of Concern ?	
Mercury	5.3	No	5.3	YES	No RBSL with which to compare; above maximum background value (0.24) in Dismantling Yard, Railyard, Amsted, and to a lesser extent at Airport.
Selenium	141	YES	141	No	Only 1 detect (141); within 2X RBSL of 100.
Vanadium	170	YES	N 321 (Sample #880)	No	Only 3 detects above RBSL of 200: Swamp-321, 321, and 301 mg/kg; all within 2X RBSL.
Zinc	61,600	No	61,600	YES	RBSL=5,000; Above RBSL in Dismantling Yard, Railyard, and Amsted.

^a Chemicals omitted from this list were considered by both parties not to be of concern.

^b Data qualifier "J" indicates estimated value; "J4" indicates estimated value, quality control outside control limits, bias not readily determined; "E" indicates estimated value due to interference; "N" indicates spiked sample recovery not within control limits; "**" indicates duplicate analysis not within control limits.

^c Risk-based screening level (RBSL) is a concentration equivalent to a 10^{-7} risk for carcinogens or an HI=0.1 for noncarcinogens, assuming reasonable maximum exposure parameters under a residential scenario for ingestion of surface soils, as discussed in EPA's Region 10 Supplemental Risk Assessment Guidance for Superfund (August, 16, 1991).

^d Highest detected value from PAH analysis in Semivolatile file is 20,000 ug/kg.